## **CLAIMS**

What is claimed is:

- 1 1. A method comprising:
- 2 receiving input data of an event;
- 3 processing said input data to generate positional data;
- 4 generating semantic information based on said positional data; and
- 5 transmitting said semantic information to an officiating entity of said event.
- 1 2. A method according to claim 1, wherein said event is a sporting event.
- 1 3. A method according to claim 2, wherein said sporting event is a soccer game.
- 4. A method according to claim 1, wherein said officiating entity is an event official.
- 1 5. A method according to claim 1, further comprising:
- 2 generating an event model from said positional data and said semantic
- 3 information; and
- storing said event model in an event model database.
- 1 6. A method according to claim 5, further comprising querying said event model
- 2 database for an officiating event.
- 1 7. A method according to claim 1, further comprising generating an animation based
- 2 on said positional data.
- 8. A method according to claim 7, further comprising transmitting said animation to

- 2 said officiating entity.
- 1 9. A method according to claim 1, further comprising transmitting said semantic
- 2 information to an officiating interface.
- 1 10. A system comprising:
- an officiating data unit to generate officiating event data; and
- an officiating device to receive said officiating event data.
- 1 11. The system of claim 10, wherein said officiating data unit comprises a tracking
- 2 system to receive input data and generate positional data from said input data.
- 1 12. The system of claim 11, wherein said officiating data unit comprises:
- an event model generator to generate an event model from said positional data;
- 3 and
- an event model database to store said event model.
- 1 13. The system of claim 12, wherein said officiating data unit comprises:
- an officiating data extractor to query said event model database for officiating
- 3 event data; and
- an officiating interface to receive said officiating event data and transmit said
- 5 officiating event data to said officiating device.
- 1 14. The system of claim 13, wherein said officiating interface receives officiating
- 2 decision data from said officiating device.
- 1 15. The system of claim 14, wherein said event model includes said officiating

- 2 decision data.
- 1 16. The system of claim 10, further comprising an event animation unit to generate an
- 2 animation from said officiating event data.
- 1 17. The system of claim 16, further comprising an officiating interface to receive said
- 2 animation and transmit said animation to said officiating device.
- 1 18. The system of claim 16, wherein said officiating device receives said animation.
- 1 19. A machine-readable medium having stored thereon data representing sequences
- of instructions, said sequences of instructions which, when executed by a processor,
- 3 cause said processor to:
- 4 receive input data of an event;
- 5 process said input data to generate positional data;
- 6 generate semantic information based on said positional data; and
- 7 transmit said semantic information to an officiating entity of said event.
- 1 20. The machine-readable medium of claim 19, wherein said event is a sporting
- 2 event.
- 1 21. The machine-readable medium of claim 20, wherein said sporting event is a
- 2 soccer game.
- 1 22. The machine-readable medium of claim 19, wherein said officiating entity is a
- 2 referee.
- 1 23. The machine-readable medium of claim 19, wherein said sequences of

- 2 instructions further cause said processor to:
- generate an event model from said positional data and said semantic information;
- 4 and
- store said event model in an event model database.
- 1 24. The machine-readable medium of claim 23, wherein said sequences of
- 2 instructions further cause said processor to query said event model database for
- 3 officiating event data.
- 1 25. The machine-readable medium of claim 19, wherein said sequences of
- 2 instructions further cause said processor to generate an animation based on said positional
- 3 data.
- 1 26. The machine-readable medium of claim 25, wherein said sequences of
- 2 instructions further cause said processor to transmit said animation to said officiating
- 3 entity.
- 1 27. The machine-readable medium of claim 19, wherein said sequences of
- 2 instructions further cause said processor to transmit said semantic information to an
- 3 officiating interface.